chronic arthritis, and lesions of the sacro-iliac joint have been rewritten and enlarged. As regards the last named, Mr. Fisher's views now approximate to those held by the Boston school in America, but in a book on manipulation we can hardly expect to find a recommendation of fixation operations in extreme cases of subluxation. His discussion of osteopathy and chiropractic is timely, and the instances he quotes of damage done by osteopaths and chiropractors should be a warning to those who are inclined to be indulgent towards a warning to those who are inclined to be indulgent towards such practices, and will furnish valuable arguments to medical practitioners who are trying to guide their patients into safe ways. As regards the elusive syndrome known as tennis elbow, but not confined to tennis players, we note that Mr. Fisher does not mention the method of treatment which has been so successfully used by Mr. G. Percival Mills of Birmingham. and which was described in our issue of January 7th (p. 12). Mr. Fisher's remarks on the value of movement and rupture of adhesions in various cases of chronic arthritis are worthy of

Under the editorial direction of three distinguished surgeons of Berlin, Halle, and Berne, a System of Urology<sup>8</sup> is being prepared. The first volume deals with urology generally, and in particular with its surgical anatomy. A careful account is given of operations on the kidneys, ureter, bladder, and male generative organs. The physiology and pathology of the urinary secretion are similarly dealt with on an elaborate scale. The book is copiously illustrated, and there is a useful index. It is a good example of the characteristic type of German publication which endeavours to combine the textbook and the reference volume. and the reference volume.

Dr. Joan Ross, now lecturer in pathology at the London School of Medicine for Women, brought out in 1925 a book on Post-mortem Appearances, which was favourably noticed in these columns (1926, i, 331). It has now deservedly passed into a second edition, which has been revised and enlarged by some additions. The book is a little longer, but there is every reason to repeat what we said on the previous occasion, except those suggestions then made as to slight changes, which have been adopted. been adopted.

All workers on mosquitos in tropical and South Africa will All workers on mosquitos in tropical and South Africa will be greatly indebted to Miss Alwen M. Evans for her Guide to the Anophelines of Tropical and South Africa, 10 which appears as one of the Memoirs of the Liverpool School of Tropical Medicine. As the author states, "it is not in any sense of the word a monograph..." but it is all the more aseful to the medical and sanitary officers in these countries, for whom, in fact, the volume is likely to prove indispensable. A key for all adult species and a key for larvae of the six most. for whom, in fact, the volume is likely to prove indispensable. A key for all adult species and a key for larvae of the six most widely distributed species is given, followed by a systematic and bionomic account of each, with excellent illustrations in the text, and at the end a series of plates of breeding places and many very beautiful delineations of arrangements of scales and tarsus markings.

Volume XLVII of the Transactions of the Ophthalmological Society of the United Kingdom<sup>11</sup> contains the proceedings during the past year of this society, and also of the Midland, North of England, and Irish Ophthalmic Societies, and of the Oxford Ophthalmological Congress in 1927. Good illustrations are provided for the various pares and the are provided for the various papers, and the present issue, like its predecessors, constitutes a valuable record of progress in ophthalmology in Great Britain.

Lippincott's Pocket Formulary 12 requires a somewhat capacious pocket. The volume has been compiled by Dr. George E. CIOUS POCKET. The volume has been compiled by Dr. GEORGE E. REHBERGER in order to provide the medical practitioner with a ready reference manual. The first section gives an alphabetical list of diseases and symptoms, with appropriate treatment and prescriptions. Some of the conditions may sound quaint to English ears, such as caked breasts and milk sickness. The latter part of the book contains lists of U.S.P. X drugs, of drugs in the National Formulary and of pay and properficial of drugs in the National Formulary, and of new and non-official remedies. Sundry tables of weights, measures, and so on are appended.

\*\*Handbuch der Urologie. Herausgegeben von A. v. Lichtenberg, F. Voelcker, H. Wildbolz. Erster Band, Allgemeine Urologie I. Berlin: J. Springer. (Roy. 8vo, pp. x + 754; 312 figures. R.M.93.)

\*\*Post-mortem Appearances. By Joan M. Ross, M.D., B.S.Lond., M.R.C.S., L.R.C.P. With a preface by E. H. Kettle, M.D. Second edition. Oxford Medical Publications. London: Milford, Oxford University Press. 1928. (Fcap. 8vo, pp. ix + 228. 7s. 6d. net.)

19 A Short Illustrated Guide to the Anophelines of Tropical and South Africa. By Alwen M. Evans, M.Sc. Liverpool School of Tropical Medicine, Memoir (New Series) No. 3. London: Hodder and Stoughton. 1927. (7½ × 10½, pp. 54; 10 figures, 12 plates. Paper cover, 7s. 6d. net; cloth, 9s. 6d. net.)

11 Transactions of the Ophthalmological Society of the United Kingdom. Vol. XLVII. London: J. and A. Churchill. 1927. (Demy 8vo, pp. xiviii + 467; 82 figures, 3 plates. 30s. net.)

12 Lippincott's Pocket Formulary. By George E. Rehberger, M.D. London: J. B. Lippincott Cempany. 1927. (4 × 8‡. 15s. net.)

## LIVER EXTRACT IN THE TREATMENT OF PERNICIOUS ANAEMIA.

REPORT BY THE MEDICAL RESEARCH COUNCIL.

The following preliminary report on the liver treatment of pernicious anaemia has been received for publication from the Medical Research Council.

The treatment of pernicious anaemia by addition of liver to the diet, introduced in America by Minot and Murphy, has already been widely adopted with encouraging results. An important development of this has recently become possible through the successful preparation, by Cohn and others, of an extract of liver containing in small bulk the unknown factor which produces the ameliorating effect. The treatment is thereby made available for patients who cannot tolerate the large daily consumption of liver itself.

In the past autumn, through the courtesy of the Pernicious Anaemia Committee of Harvard Medical School, the Medical Research Council received information about this method of preparing liver extract, and were invited to make trial of it with a view to assisting introduction of the treatment in this country. On the basis of this information experimental work was undertaken in the Council's laboratories at the National Institute for Medical Research, and a modification of the American process was found, through the co-operation of Professor F. R. Fraser of St. Bartholomew's Hospital, to yield a satisfactory extract. To increase the scope of the work the Council then invited the co-operation of manufacturing firms likely to be interested, and arrangements were made for clinical trials of the preparations thus obtained in adequate quantity.

Supplies of liver extract made on a manufacturing scale by the modified process were received from the Boots Pure Drug Company, from the British Drug Houses, Limited, and from Messrs. Burroughs Wellcome and Co.

It is at present impossible to gauge the therapeutic effects of liver extracts in pernicious anaemia by any other method than that of direct trial upon human patients. The extracts supplied by the three firms were, therefore, distributed widely to various hospitals, and clinical reports upon the activity of the several preparations have been received from the following physicians: Dr. John Cowan, Glasgow; Dr. S. P. Davidson, Edinburgh; Professor E. C. Dodds, Middlesex Hospital; Professor T. R. Elliott, University College Hospital, London; Professor A. W. M. Ellis, London Hospital; Sir Thomas Houston, Belfast; Professor W. E. Hume, Newcastle-on-Tyne; and Professor E. Mellanby, Sheffield. To these, and the colleagues who have been associated with them in this work, the Council are much indebted.

A total of 34 apparently clear cases of the disease came under treatment. The object of the trials was to test the activity of each extract as rapidly as possible, rather than to watch the results over a long period of time. For this purpose the early increase in the count of reticulocytes—the young red cells with special staining properties-was adopted, as it had been found to be satisfactory in the American work. This rise is usually associated with clear sensations of improvement on the part of the patient, and it is succeeded by a progressive increase in the general red cell count, while the relative proportion of reticulocytes diminishes.

Out of the 34 cases all but 2 showed a good response. In 23 of these the conditions were such that other reasons for the improvement than the administration of extract were clearly excluded. In the remaining 9 response during treatment was no less marked, but the possibility of natural remissions or the influence of other treatments, such as previous administration of fresh liver, rendered the conclusion less certain. The daily dose of extract, corresponding to half a pound, or 250 grams, of liver, generally brought a clear rise in reticulocytes, culminating about the twelfth or fifteenth day; double that amount daily excited an earlier reaction, with a maximum as early as the fifth day. As illustrating the remoter benefit in a case that had been treated with only the smaller doses, but over a longer period, the total red cell count rose from 750,000 to 5,000,000 in thirty-four days.

These effects are identical with those obtained with liver itself, although the effect of a given dose of the extract is not so great as that of the quantity of liver from which it is

derived. Time has not yet permitted an estimate of any possible deterioration of the extract on keeping.

These preliminary reports enable the Medical Research Council to state that the preparations submitted have been found to be satisfactory. The process used in making these extracts has not necessarily any peculiar value as compared with possible alternatives, but it is one capable of ready application on a large scale. The Council believe that further progress will be best facilitated if extracts of the type which they have investigated are now made available, along with any others introduced apart from the Council's action, to the medical profession in general.

It is understood that supplies of these liver extracts will at once be obtainable, through the usual commercial channels, from the firms already named. The Council are not themselves able to deal with any applications for the material.

## THE GLASGOW MEDICAL JOURNAL.

## A CENTENARY NUMBER.

A HUNDRED years have passed since Dr. William Mackenzie launched the first number of the Glasgow Medical Journal upon the waters of Scottish medical life. His name and a list of the appointments which he held occupy such a prominent position on the title-page of the first number that it is fair to assume that even if he did not himself build the ship, his at least was the hand that knocked away the dog-shores and allowed the vessel to glide down the metaphorical ways, as so many tall ships and ocean liners have done on the banks of the actual Clyde. This centenary occasion is celebrated by the publication of a commemorative number which consists entirely of historical articles and notes, and is illustrated by a number of portraits and views. It includes also papers on medical journalism by Sir Dawson Williams and Sir Squire Sprigge.

Sir Dawson Williams's contribution-which now has a sad interest as being the last of the few articles he ever signed-traces the origin of newspapers to the newsletters of business firms, such as the great Augsburg house of Fugger, whose system, at first intended only for their own use, was afterwards extended, so that their periodical dispatches were allowed to be copied and sold to the public. This interesting article is illustrated by reproductions of the title of the earliest French medical paper, the Journal de Médecine of 1683, and the first British one, the Medicina Curiosa of 1684, of which latter only two numbers are known to have been published. Our late Editor recalls that the first person to issue a newspaper in the modern sense—that is to say, a printed sheet published at regular intervals—was a Doctor of Medicine, Theophrastus Rendudot, whose Gazette and Nouvelles Ordinaires appeared in Paris in 1631.

Sir Squire Sprigge would put back the origin of medical journalism to a date somewhat earlier than 4000 B.C. when an unknown Babylonian physician recorded a case of incurable dropsy on a clay tablet; but he evidently realizes that as one swallow does not make a summer, so one, or even several, clay tablets do not constitute a medical periodical. He assigns the honour of being the first British medical newspaper to the Foreign Medical Review of 1780. Other journals followed this, some of which survived the date of the first appearance of the Lancet, which in 1823 made a complete innovation in the matter and manner of medical journalism. It had its rivals, as Sir Squire Sprigge tells his readers, among them the Provincial Medical Journal, the organ of the great Association founded by Sir Charles Hastings, and our lineal ancestor.

The Glasgow Medical Journal resembles perhaps more some of the earlier medical publications in that it has at no time been published at shorter intervals than one month. Indeed, for nearly half the time of its publication it was a quarterly, but since the year 1877 it has appeared regularly once a month. It has long been produced by the Glasgow and West of Scotland Medical Association, of which Dr. J. Wyllie Nichol is president, and the two editors to-day are Mr. John Patrick and Dr. George A.

The Journal has not been without its local rivals during its long career, of one of which there is an entertaining account in the leading article of this centenary number, "The Glasgow Medical Journal and its Editors." was the Glasgow Medical Examiner, which had a brief existence in 1831, and was revived in 1869. It became known as the "Mustard Plaster," so called partly from the colour of its wrapper, but still more on account of the blistering qualities of its articles. Even so late as 1869 it ridiculed Lister, congratulating its readers on his removal to Edinburgh and on the hope that "our Alma Mater will no doubt be purified from even the smell of the quackish puffed nostrum" (that is, carbolic acid). Gairdner was bracketed with Lister as a subject of its denunciation. But the Journal itself was not always polite in its reviews of books. In 1853 Syme came in for very rough treatment, even being reminded by the reviewer of individual patients whom he had failed to cure.

The principal of the University, Sir Donald MacAlister, has contributed a short note on that school as it was a hundred years ago, when the professor of botany was Sir William Hooker, afterwards director of Kew Gardens, whose son and successor, Sir Joseph, the friend of Darwin and Huxley, died as recently as 1911. The school was flourishing, for at that time the number of matriculated students of medicine was 428. The Scottish universities at that period, and for some time afterwards, had no rivals in Great Britain as regards medical degrees, for Oxford and Cambridge scarcely counted as schools of medicine, and London University was not. Yet few Englishmen seem to have availed themselves of the opportunities offered at Glasgow, for of the thirty-eight degrees granted in 1827 in medicine or surgery, only two were conferred upon Englishmen. Probably Edinburgh offered greater attractions. Sir Donald MacAlister's article is illustrated by a photograph of the picturesque old college in the High Street.

The old universities did not condescend to meddle with the "base mechanick art" of surgery, except in so far as it was studied by physicians who professed to control the practitioners of surgery. Thus in Glasgow, as in London, we find the teaching of surgery in the hands of corporations of less dignity than the universities. The Faculty of Physicians and Surgeons of Glasgow was established by a charter of King James VI in the year 1599, and given authority, among other things, to examine all persons professing the art of chirurgie. It is noteworthy that in the same charter it is enacted that no one is to practise medicine "without ane testimonial of ane famous universitie quhair medicine be taught." When the University took to granting degrees in surgery, as it did in 1816, competition between it and the Faculty became keen. Despite the prestige of the additional title of "Royal" which was granted by King Edward in 1909, the Faculty finds itself handicapped by the action of the Carnegie Trust, under which many students' university fees are paid. Although the Faculty had furnished surgical teaching to its apprentices, the extramural school really dates from the year 1744, when William Cullen, a physician, founded it by instituting courses of lectures, but Dr. John Henderson tells us, in his article on "The position of extramural teaching in Glasgow," that the era of continuous teaching in Glasgow dates definitely from the establishment of the medical school of Anderson's College in 1799. This very flourishing school at one time called itself Anderson's University, although it was never incorporated as such. It still continues to contribute largely to the educational needs of Glasgow medical students, and among its teachers have been many distinguished men, not the least of whom is the present regius professor of surgery, Dr. Archibald Young. Besides a former school of medicine of the Western Infirmary, the Royal Infirmary has also had its medical school, for which a charter was obtained in 1875, and this school is still carried on, notwithstanding the competition from which it and Anderson's

This centenary number contains much more that is of interest, including a paper by Dr. Fergus on the Glasgow hospitals, and the editors, Mr. Patrick and Dr. Allan, deserve congratulations on the result of their labours.

College suffer from the University.